

## **PROJECTS INSTALLTION REPORT – September 2009**

- (1) U.S. Radiation Sensors for the Baseline Surface Radiation Network Program (in transit)
- (2) U.S. Climate Reference Network Site (in transit)
- (3) Black Carbon Sampling (training completed and program operating)
- (4) U.S. Surface Ozone Sampling (in transit)
- (5) U.S. Surface Heat and Energy Balance Fluxes (in transit)
- (6) Finnish Carbon Dioxide and Methane concentrations (operating)
- (7) Finnish Carbon Dioxide and Methane Fluxes (partially installed, not operating)
- (8) U.S. Green House Gas Sampler (training completed and program operating )
- (9) Finnish Aerosol Size Distribution Monitoring (operating and awaiting additional modifications and infrastructure support)
- (10) Aerosol Filter Sampling
- (11) Russian Radiation Sensors (installed)
- (12) Russian meteorological instrumentation (scheduled for winter deployment)
- (13) Russian Total Ozone Measurements (installed)
- (14) Russian Permafrost Measurements (installed)
- (15) Precipitation chemistry (installed)
- (16) Russian UV measurements (installed).

### **SHIPPING**

All Russian and Finnish equipment was on site at start of deployment period.

U.S. Shipment was significantly delayed and expected to arrive after U.S. team departs Tiksi

### **CUSTOMS**

FMI Equipment cleared customs and has been delivered

NOAA customs paperwork in progress with support from Roshydromet-Yakutsk

### **DATES OF INSTALLATION IN TIKSI COMPLETED**

All science teams will have departed Tiksi by October 1

There was no overlap with construction team

### **INFRASTRUCTURE SUPPORT**

The contract between CH2MHill and the Polar Foundation was signed in early September.

Representatives of Roshydromet Yakutsk met with members of the Russian and U.S. science teams at the Yakutsk Airport on September 21.

A representative of the Polar Foundation met with the Science teams at the Tiksi site on September 23<sup>rd</sup>

The local Tiksi Roshydromet office provided significant infrastructure support

The construction crew contracted to the Polar Foundation foreman and crew are scheduled to arrive in Tiksi on October 2. Extensive project requests have been developed.

Data communications have been established between the Tiksi Observatory and AARI in St Petersburg

An AARI IT system manager deployed a video conferencing system.

A computer system has been installed at the CAF attached to security cameras; there is a wireless transmission of security camera data to the weather station.

The weather station has good internet connectivity

BECAUSE THERE WAS NO OVERLAP BETWEEN SCIENCE TEAMS AND CONSTRUCTION TEAMS, SIGNIFICANT TIME WAS SPENT ON INSPECTIONS AND DEVELOPMENT OF DETAILED REQUESTS FOR INFRASTRUCTURE IMPROVEMENTS.

## **REPORT ON ROADS AND POWER**

A new insulated power line has been installed from the town of Tiksi to the weather station (and CAF) and the road has been considerably improved.

## **REPORT ON WEATHER STATION**

The weather station is largely completed and occupied by the Roshydromet Tiksi weather station staff. Internet communications are available. There are two furnished bedrooms, a kitchen and good office space and accessible roof space where some science projects are presently being installed; it already supports some weather station instruments. A list of final items for completion has been submitted, including plumbing and water, additional insulation, drainage, additional weatherization, and noise abatement issues during high wind periods. The weather station is spacious, comfortable and furnished. There is storage, and adequate additional space inside as well as on the roof for science projects without interference with the routine weather station activities. Power has been uninterrupted during this visit, although some UPS activity indicates that there may be ongoing power fluctuations. The diesel generator is not yet hooked into the power system.

## **REPORT ON CLEAN AIR FACILITY**

The CAF building has been constructed on the foundation and has some electrical outlets. The interior finish work is in progress. The science team has confirmed the location of outside towers and racks and connecting walkways and power/communication lines. The UPS was installed by Roshydromet and NOAA science teams.

## **OPERATIONS**

Roshydromet has received official approval for measurements that will be made by the initial 15 projects. The Roshydromet Tiksi Office has interviewed the science teams on the technical, logistical and personnel requirements for each project and is developing plan for support. Programs of Operation have been submitted to the Tiksi Roshydromet Office.

The Roshydromet Tiksi Office has assigned a central point of contact and procedure for communications on technical issues relating to the new Observatory measurements.

Training was provided to Tiksi Observatory staff on U.S, Finnish and Russian projects.

Tiksi Roshydromet has hired an engineering support technician who will have a primary assignment of operating observatory equipment.

## **MEETINGS IN YAKUTSK AND MOSCOW**

The Russian and US Science teams and the Tiksi Station Director will meet with Roshydromet -Yaktusk Representatives to discuss contracts, operations (including further training), oversight of the construction and customs of the US equipment.

The Russian, US and Finnish science team is scheduled visit the U.S. Embassy and with Roshydromet in Moscow on October 5 and 6 to provide a trip report and develop a schedule of activities for the following months. Representatives of the science teams will be:

Alexander Makshtas  
Alexander Reshetnikov  
Alexi Konoplev  
Taneil Uttal  
Alexander Kuzmichov  
Robert Albee

Ludmila Matrosova

**PERSONNEL THAT WERE ON SITE IN TIKSI**

AARI

Alexander Makshtas

Vasily Kustov

Alexander Kuzmichov

MGO

Alexander Reshetnikov

Victor Ivakhov

NOAA

Taneil Uttal

Ludmila Matrosova

Robert Albee

Brian Vasel

FMI

Tuomas Laurila

Mika Aurela

Eija Asmi

Irina Loutsenko